

REMARKS

I. Status of the Claims

Claims 1-31 are pending. No claims have been amended by this Response. Applicant's representative respectfully thanks the Examiner for her time in a telephonic interview on March 15, 2006. During the interview, inconsistencies among the claim rejections were discussed. Further to this telephonic interview, it is understood that the Examiner meant to withdraw the rejection of method claims 1-10, 21 and 23 under 35 U.S.C. § 102(b) over Cywar et al (U.S. Patent No. 6,262,141) ("Cywar"). It is also understood some product-by-process claims may have been inadvertently left out by the Examiner in the rejections under 35 U.S.C. § 102. Accordingly, it was agreed that the next Office Action in this case will not be a final Office Action.

Applicant respectfully acknowledges and appreciates the Examiner's withdrawal of the rejection for claims 1, 13-15, 21, 22, and 29-31 under 35 U.S.C. § 112. In addition, Applicant respectfully acknowledges and appreciates the Examiner's withdrawal of the rejection for claims 1-10, 21, and 23 under 35 U.S.C. § 102(b) as being anticipated by Cywar. Finally, Applicant respectfully acknowledges and appreciates the Examiner's withdrawal of reliance on the following references in the rejections of record: RO 115805 B, Dobbs et al. (U.S. Patent No. 5,380,520), Yada et al (U.S. Patent No. 4,604,411), and Itoh et al. (U.S. Patent No. 4,865,866).

II. Rejections under 35 U.S.C. § 102

A. U.S. Patent No. 6,262,141 to Cywar et al.

The Examiner rejects claims 11-20, 22, 24 and 29¹ under 35 U.S.C. § 102(b) as being anticipated by Cywar et al (U.S. Patent No. 6,262,141) ("Cywar"). Office Action at page 4. In the rejection, the Examiner states, "product by process claims are to be anticipated by a product obtained by a different prior art process if the product obtained would be expected to have the same structure and/or properties as the instantly claimed product." *Id.* at 2. The Examiner further contends, "[t]he disclosure of Cywar et al anticipates the instant claims because an aqueous solution of the required monomers is formulated and irradiated with UV light." *Id.* at 4-5. Applicants respectfully traverse the rejection for the reasons already of record as well as those presented below.

A claim is anticipated under 35 U.S.C. § 102(b) **only** if each and every element as set forth in the claim is found in a single reference. See *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987) and M.P.E.P. § 2131. When examining a product by process claim, the structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where the structure or properties of the process are capable of being construed as limitations, See, e.g., *In re Garnero*, 412 F.2d 276, 279, 162 USPQ 221, 223 (CCPA 1979) (holding "interbonded by interfusion" to limit structure of the claimed composite and noting that terms such as " "intermixed," and "ground in

¹ Per the undersigned's conversation with the Examiner on March 15, 2006, only the product-by process claims, i.e., claims 11-20, 22, 24, and 29, were intended to be included in this rejection, rather than claims 11-24 and 29 as indicated in the Office Action. Accordingly, only claims 11-20, 22, 24, and 29 are addressed in this response to the rejection.

place," are capable of construction as structural limitations); See also *Atlantic Thermoplastics Co., Inc. v. Faytex Corp.*, 970 F.2d 834 (Fed. Cir. 1992) (stating a product-by-process claim is a claim to a product limited by the process elements).

Independent claims 11 and 29 recite a synthetic polymer gel produced by irradiating an **aqueous** solution with ultraviolet light. See, e.g. claim 11. Independent claims 22 recites a synthetic polymer gel produced by irradiating with UV light a **suspension or water-in-oil type emulsion**, both of which were formulated from an aqueous solution. See claim 22. On the other hand, *Cywar* discloses an acrylic polymer prepared by a sequence of steps, the last of which is irradiating gel particles with light to decompose the photoinitiator added previously. See *Cywar*, at column 7, lines 18-35. Notably, *Cywar* teaches that the gel particles to be irradiated are substantially **dried**, i.e., those containing less than 20% by weight of moisture, thereby allowing the irradiation step to conclude the process of forming the acrylic polymer. *Id.* Thus, by focusing on particles that are substantially dried, *Cywar* teaches away from claims 11 and 29, which recite irradiation of an aqueous solution, and claim 22, which recites the irradiation of a suspension or water-in-oil type emulsion. Accordingly, *Cywar* fails to teach each and every element recited in independent claims 11, 29, and 29.

In addition, claim 29 of Applicant's invention is directed to a cosmetic composition comprising a synthetic polymer gel. *Cywar* does not teach a cosmetic composition and therefore, for this additional reason, cannot anticipate claim 29.

Therefore, the synthetic polymer gel recited in Applicant's claims 11, 22, and 29, which are obtained by a different process than disclosed by *Cywar*, cannot be anticipated by *Cywar* because of the discrepancy in properties (dry versus aqueous)

during the process of forming the polymer gel. Accordingly, Applicant respectfully requests the rejection be withdrawn.

B. U.S. Patent No. 6,691,715 to Matz et al.

The Examiner rejects claims 11-20, 29 and 30 as under 35 U.S.C. § 102(e) as being anticipated by Matz et al. (U.S. Patent No. 6,691,715) ("Matz"). Office Action at page 5. The Examiner alleges that *Matz* teaches "using the disclosed polymers in gel form." Office Action at page 2. Thus, the Examiner concludes, "the products obtained by the thermal solution polymerization method taught by Matz et al would be expected to be the same as the products obtained by the instantly claimed method because the same monomers are being polymerized in aqueous medium in the presence of a persulfate initiator." *Id.* at 5.

Applicant respectfully disagrees with the Examiner and traverses for at least the following reason. The Examiner admits that the polymers of *Matz* are made by a process that "does not mention UV radiation." *Id.* In contrast, the present claims rejected by the Examiner each recite ultraviolet radiation. As a result, Applicant's claims cannot be anticipated because each and every limitation as set forth in the claim is not described in *Matz*. See M.P.E.P. § 2131. Applicant respectfully requests the rejection be withdrawn.

C. U.S. Patent No. 4,690,788 to Yada et al.

The Examiner rejects claims 11-20 and 29 under 35 U.S.C. § 102(b) as allegedly being anticipated by Yada et al. (U.S. Patent No. 4,690,788) ("Yada"). Office Action at page 5. Specifically, the Examiner states, "the gel polymers produced by the process disclosed by Yada et al would be expected to be the same as the gel polymers

produced by the instantly claimed process, in the absence of evidence to the contrary."

Id. The Examiner admits that *Yada* "do[es] not teach photopolymerization in the presence of persulfate initiators." *Id.* However, the Examiner states, "the difference in manner of activating the initiator would not be expected to provide a different product."

Id. at 3.

Applicant respectfully traverses the rejection for the reasons already of record as well as those presented below. *Yada* discloses the polymers formed by polymerization of water-soluble vinyl monomers by **thermal** polymerization methods using radical polymerization methods such as persulfate. Column 4, Lines 25-27. Furthermore, *Yada* discloses photopolymerization by irradiation of light rays such as ultraviolet rays. Column 4, Lines 37-39. But *Yada* does not teach photopolymerization **in the presence of** persulfate initiators.

As the Examiner is well aware, in order to establish anticipation, the identical invention must be set forth in as complete detail as it appears in the claim. See *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989) and M.P.E.P. § 2131. As discussed above, the Examiner must not treat the product-by-process claims as product claims without the process limitations. To do otherwise is directly contrary to the Federal Circuit's holding in *Atlantic Thermoplastics*.

Applicant's present invention teaches polymers formed by photopolymerization in the presence of persulfate initiators, which is clearly not taught in *Yada*. Thus, *Yada* fails to anticipate the claimed invention for this reason. Additionally, claim 29 of Applicant's invention is directed to a cosmetic composition comprising a synthetic polymer gel. *Yada* does not teach a cosmetic composition and therefore, for this

additional reason, it cannot anticipate claim 29 of Applicant's present invention.

Applicant respectfully requests that this rejection be withdrawn.

D. U.S. Patent No. 5,519,088 to Itoh et al.

The Examiner rejects claims 11-22, 24, and 28-31 under 35 U.S.C. § 102(b) as allegedly being anticipated by Itoh et al. (U.S. Patent No. 5,519,088) ("*Itoh*"). Office Action at page 6. Again, the Examiner admits that *Itoh* "do[es] not teach photopolymerization in the presence of persulfate initiators." *Id.* However, the Examiner concludes that the "difference in manner of activating the initiator would not be expected to provide a different product." Office Action at page 3.

Applicant respectfully traverses the rejection for the reasons already of record as well as those presented below. As stated previously, Applicant's present disclosure teaches a synthetic polymer gel formed by photopolymerization **in the presence of** persulfate initiators. M.P.E.P. § 2131 states that a claim is anticipated under 35 U.S.C. § 102(b) only if each and every element as set forth in the claim is found in a single reference. Because *Itoh* does not disclose the photopolymerization in the presence of persulfate initiators, the Examiner has inappropriately applied 35 U.S.C. § 102(b).

Additionally, claims 29-31 of Applicant's invention are directed to a cosmetic composition comprising a synthetic polymer gel. *Itoh* does not teach a cosmetic composition and therefore, for this additional reason, it cannot anticipate claims 29-31 of Applicant's present invention.

Furthermore, *Itoh* fails to teach another element recited in Applicant's claim 31. Specifically, claim 31 recites, in relevant part, a "cosmetic composition comprising a synthetic gel particle core comprising at least one additive chosen from **pigments**,

fillers, and nacres.” Claim 31 (emphasis added). *Itoh* discloses the addition of additives to an aqueous gel such as film-smoothening agents and anti-foaming agents. Because *Itoh* does not teach a cosmetic composition comprising synthetic gel particles comprising pigments, fillers, and nacres, *Itoh* does not teach each element of Applicant’s invention. Accordingly, Applicant respectfully asserts that this rejection is in error and requests that it be withdrawn.

E. U.S. Patent No. 3,963,685 to Abrahams

The Examiner rejects claims 11-20 under 35 U.S.C. § 102(b) as allegedly being anticipated by Abrahams (U.S. Patent No. 3,963,685) (“*Abrahams*”). Office Action at page 6. The Examiner assumes that the product obtained by polymerizing the monomers taught by *Abrahams* in the presence of a persulfate or by utilizing radiation alone is the product obtained by the method set forth in Applicant’s claims in the absence of evidence to the contrary. *Id.* However, the Examiner admits that, “[i]t is agreed that Abrahams does not specifically teach using radiation in the presence of a persulfate initiator.” *Id.* at 4.

Applicant respectfully traverses the rejection because Abrahams does not contain **every limitation** of the claimed products. More specifically, Abrahams does not teach or disclose a synthetic gel polymer produced by UV radiation in the presence of persulfate. As discussed above, the absence of a single element or limitation indicates the reference neither describes nor anticipates the claim. M.P.E.P. § 2131. Accordingly, Applicant respectfully asserts that this rejection is in error and should be withdrawn.

III. Rejections under 35 U.S.C. § 103

The Examiner rejects claims 1-10, 21, 23 and 25-27 under 35 U.S.C. § 103(a) as being unpatentable over *Itoh*. See Office Action at page 7. In particular, the Examiner states, “[i]t would have been obvious to one skilled in the art at the time of the invention to formulate an aqueous solution of water-soluble monomers, as taught by Itoh et al., and to irradiate the solution with UV light in the presence of combinations of the disclosed initiators, such as persulfate for radical polymerization and a photoinitiator, because Itoh et al. teach that the two polymerization initiation methods disclosed can be combined when using ultraviolet light.” *Id.* Applicants respectfully traverse the rejection for the following reasons.

According to M.P.E.P. § 2143, a prima facie case of obviousness is established only when there is some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Also required under M.P.E.P. § 2143 is that the prior art reference must teach or suggest **all** the claim limitations. Specifically, all words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

A. Method Claims

1. Claims 1-10, 21, 23, 25

As emphasized above, *Itoh* does not teach photopolymerization **in the presence** of persulfate initiators. Moreover, the Examiner has not shown any motivation to combine the elements of *Itoh* to create Applicant's invention when an element is missing from the teachings in *Itoh*, nor does Applicant believe that such motivation exists. Thus,

Itoh would necessarily fail to suggest each and every element in the rejected claims.

The Examiner may not pick and choose among isolated disclosures in the reference to defeat patentability of a claimed invention. Such picking and choosing amounts to improper hindsight reconstruction, and is prohibited. *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q. 2d 1596, 1600 (Fed. Cir. 1988). Therefore, contrary to the Examiner's assertion, it could not have been obvious to one skilled in the art at the time of the invention to create a method of producing a synthetic polymer gel recited by the Applicant's independent claims 1 and 21. Applicant respectfully asserts that this rejection should be withdrawn.

2. Claims 26 & 27

In addition to the deficiencies described above, *Itoh* is also missing another claim limitation recited in Claim 26 and 27 of Applicant's claimed invention. The Examiner states, "[t]he method wherein gel products prepared with filler particles suggest the gel particles of instant claims 26 and 27." Office Action at page 7. Claim 26 and 27 of Applicant's claimed invention comprise a method for producing a synthetic polymer gel wherein the formulated aqueous solution comprises at least one additive chosen from pigments, fillers and nacres particles. While *Itoh* discloses the addition of various additives to an aqueous gel such as film-smoothening agents and anti-foaming agents, the additives disclosed are not chosen from pigments, fillers, and nacres particles. See Column 13, lines 10-16. Therefore, *Itoh* does not teach or suggest all the claim limitations recited in Applicant's claimed invention, and for at least this reason, Applicant respectfully asserts that the rejection should be withdrawn.

B. Product-by-Process Claim

With respect to claim 28, the Examiner alleges *Itoh* teaches a synthetic polymer gel produced according to the Applicant's present invention. See Office Action at page 7. As discussed above, the Examiner fails to appreciate the holding of *Atlantic Thermoplastics* which held that product-by-process claims only cover products that are produced by the process steps recited in the claim. In addition, *Itoh* fails to disclose fillers, pigments, and nacres particles as taught in Applicant's present invention. In view of these deficiencies, Applicant respectfully asserts that this rejection is in error and should be withdrawn.

CONCLUSION

In view of the foregoing remarks, Applicant respectfully requests the reconsideration of this application, and the timely allowance of the pending claims. If the Examiner believes a telephone conference could be useful in resolving any outstanding issues, she is respectfully urged to contact Applicant's undersigned counsel at 202-408-4368. Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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